Listing of Claims:

1. (**CURRENTLY AMENDED**) Automated transaction method comprising the steps of:

determining electronically a bioinformatic value associated with a user; and

transacting via a processor with the user according to the bioinformatic value, wherein such transaction comprises detecting genetic discrimination or fraud by detecting identical genetic terms from genetic samples of a plurality of transacting users, such identical genetic terms from different transacting users enabling detection of possible fraudulent sequence clone or twin matching when the transacting users that are detected to have identical genetic terms are not actually true sequence clones or matching twins, or possible discrimination of true sequence clones or matching twins when the transacting users classified in the same genetic group or class do not obtain substantially fair or equitable transaction terms, wherein the bioinformatic value is automatically determined when or after the user permits access to a voluntarily-selected portion of his or her personal genetic nucleotide [[and related protein folding structure]] profile, such accessible portion being associated or used with evaluating the user transaction via said processor, an other portion of such genetic [[and related protein]] profile being not voluntarily-selected by the user and thereby inaccessible for evaluating the user transaction, wherein the processor processes the bioinformatic value automatically using one or more data structure comprising one or more user identifier field and genetic sequence subset, mask, screen or filter field, such that a user reference sequence is processable securely by the processor in an authorized transaction using the genetic sequence subset, mask, screen or filter field to qualify or evaluate one or more participating user, such one or more data structure comprising one or more application-specific transaction control and payload fields, and processed digitally in an representative electronic signal form which is encoded,

compressed, transmitted, stored, received and decoded, according to one or more secure signal or data modulation scheme, such one or more data structure further referring to or reference uniquely one or more personally identifiable alphanumeric or text string, electronic signal, or representative digital information that classifies or processes the user bioinformatic value according to volunteered, permitted, or user-authorized mask, screen, filter, or logical criteria for defining, recognizing, identifying, or generating one or more subset or sequence portion of a [[more]] complete, reference, or generalized genetic sequence associated with the user or other reference entity, such one or more data structure further comprising a reference sequence, a mask subset, indexing flags, and a classification object, such that such one or more data structure serves to mask functionally the bioinformatic value according to user authorization or permit of network transaction activity, whereby automatically selective bioinformatic segment revelation limits disclosure deliberately by the user only to personal gene sequence locations associated with the transaction evaluation and related personal risk.

2. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value comprises a likelihood or risk of the user having or developing a genetically-based medical or physiological condition, wherein the transaction step comprises providing the user with an insurance policy to cover the occurrence of the genetically-based condition.

3. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value comprises a likelihood or risk of the user having or developing a genetically-based mental or emotional condition, wherein the transaction

step comprises providing the user with a service contract in contemplation of the occurrence of the genetically-based condition.

4. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value comprises a likelihood or risk of the user having or developing a genetically-based condition, wherein the transaction step comprises providing the user with a promotional offer or bid to serve the genetically-based condition.

5. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value comprises a classification of the user according to a user-authorized mask, such mask comprising a subset of a genetic sequence associated with the user.

6. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value comprises a likelihood or risk of the user having or developing a genetically-based condition based on a statistical or actuarial table and a genetic or heredity profile associated with the user.

7. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value is processed for transaction with the user according to a rule set that is applicable to a plurality of users in a temporal or jurisdictional grouping on a non-discriminatory basis.

8. (PREVIOUSLY PRESENTED) The method of Claim 1 further comprising the steps of:

determining electronically an other bioinformatic value associated with the user; and

modifying the transaction with the user according to the other bioinformatic value.

9. (ORIGINAL) The method of Claim 8 wherein:

the other bioinformatic value comprises an increase or decrease of likelihood or risk of the user having or developing the genetically-based condition.

10. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value is determined by a server in a network, and the bioinformatic value is stored confidentially in a database associated with the server, the server transacting remotely with the user through the network to enable a medical service for the user.

11. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value is associated with an other user, and the transaction according to the bioinformatic value occurs separately with both users on a confidential and non-discriminatory basis.

12. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value is authentically generated by a portable user device, the transaction updating a user account, which is accessible by the user device.

Claims 13-20 (CANCELED)

21. (**CURRENTLY AMENDED**) The method of Claim 1 wherein:

the bioinformatic value or the genetic nucleotide [[and related protein folding structure]] profile is represented in a data structure that may be provided in a modulated electronic signal.

22. (ORIGINAL) The method of Claim 1 wherein:

the user transaction comprises a plurality of offers to the user for transacting competitively according to the bioinformatic value.

23. (PREVIOUSLY PRESENTED) The method of Claim 1 wherein:

the bioinformatic value determination generates an alert or report indicating a fraudulent or identical genetic nucleotide profile or state.

24. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value determination generates a discrimination indication or alert when comparing bioinformatic values associated with a plurality of users.

25. (ORIGINAL) The method of Claim 1 wherein:

the bioinformatic value is determined using a signal generated electronically by a biometric or bioinformatic sensor for determining a personal genetic sequence of the user.

26. (**CURRENTLY AMENDED**) The method of Claim 1 wherein:

the bioinformatic value or the genetic nucleotide [[and related protein folding structure]] profile corresponds effectively with a single nucleotide polymorphism (SNP) associated with the user.

27. (**CURRENTLY AMENDED**) Automated transaction method comprising the steps of:

permitting by a user access to a voluntarily-selected portion of a personal genetic nucleotide [[and related protein folding structure]] profile of the user, such accessible portion being used to determine electronically a bioinformatic value associated with the user, an other portion of such genetic nucleotide [[and related protein folding structure]] profile being not voluntarily-selected by the user and thereby inaccessible for determining the bioinformatic value; and

transacting via a processor by the user according to the determined bioinformatic value, wherein such transaction comprises detecting genetic discrimination or fraud by detecting identical genetic terms from genetic samples of a plurality of transacting users, such identical genetic terms from different transacting users enabling detection of possible fraudulent sequence clone or twin matching when the transacting users that are detected to have identical genetic terms are not actually true sequence clones or matching twins, or possible discrimination of true sequence clones or matching twins when the transacting users classified in the same genetic group or class do not obtain substantially fair or equitable transaction terms, wherein the processor processes the bioinformatic value automatically using one or more data structure comprising one or more user identifier field and genetic

sequence subset, mask, screen or filter field, such that a user reference sequence is processable securely by the processor in an authorized transaction using the genetic sequence subset, mask, screen or filter field to qualify or evaluate one or more participating user, such one or more data structure comprising one or more application-specific transaction control and payload fields, and processed digitally in an representative electronic signal form which is encoded, compressed, transmitted, stored, received and decoded, according to one or more secure signal or data modulation scheme, such one or more data structure further referring to or reference uniquely one or more personally identifiable alphanumeric or text string, electronic signal, or representative digital information that classifies or processes the user bioinformatic value according to volunteered, permitted, or user-authorized mask, screen, filter, or logical criteria for defining, recognizing, identifying, or generating one or more subset or sequence portion of a [[more]] complete, reference, or generalized genetic sequence associated with the user or other reference entity, such one or more data structure further comprising a reference sequence, a mask subset, indexing flags, and a classification object, such that such one or more data structure serves to mask functionally the bioinformatic value according to user authorization or permit of network transaction activity, whereby automatically selective bioinformatic segment revelation limits disclosure deliberately by the user only to personal gene sequence locations associated with the transaction evaluation and related personal risk.

28. (**CURRENTLY AMENDED**) Automated transaction method comprising the steps of:

determining electronically by a care-giver a bioinformatic value associated with a user, the user permitting access to a voluntarily-selected portion of a personal genetic

nucleotide [[and related protein folding structure]] profile of the user, such accessible portion being used to determine the bioinformatic value associated with the user, an other portion of such genetic nucleotide [[and related protein folding structure]] profile being not voluntarily-selected by the user and thereby inaccessible for determining the bioinformatic value; and transacting via a processor with the user a healthcare service according to the determined bioinformatic value, wherein the processor processes the bioinformatic value automatically using one or more data structure comprising one or more user identifier field and genetic sequence subset, mask, screen or filter field, such that a user reference sequence is processable securely by the processor in an authorized transaction using the genetic sequence subset, mask, screen or filter field to qualify or evaluate one or more participating user, such one or more data structure comprising one or more application-specific transaction control and payload fields, and processed digitally in an representative electronic signal form which is encoded, compressed, transmitted, stored, received and decoded, according to one or more secure signal or data modulation scheme, such one or more data structure further referring to or reference uniquely one or more personally identifiable alphanumeric or text string, electronic signal, or representative digital information that classifies or processes the user bioinformatic value according to volunteered, permitted, or user-authorized mask, screen, filter, or logical criteria for defining, recognizing, identifying, or generating one or more subset or sequence portion of a [[more]] complete, reference, or generalized genetic sequence associated with the user or other reference entity, such one or more data structure further comprising a reference sequence, a mask subset, indexing flags, and a classification object, such that such one or more data structure serves to mask functionally the bioinformatic value according to user authorization or permit of network transaction activity, whereby

automatically selective bioinformatic segment revelation limits disclosure deliberately by the user only to personal gene sequence locations associated with the transaction evaluation and related personal risk.